

Title (en)

SOLID PARTICLE CARRYING METHOD AND CARRYING SYSTEM

Title (de)

FESTSTOFFPARTIKELTRAGEVERFAHREN UND -TRAGESYSTEM

Title (fr)

PROCÉDÉ DE TRANSPORT DE PARTICULES SOLIDES ET SYSTÈME DE TRANSPORT

Publication

**EP 3597576 A4 20210120 (EN)**

Application

**EP 18767053 A 20180316**

Priority

- JP 2017053482 A 20170317
- JP 2018010426 W 20180316

Abstract (en)

[origin: EP3597576A1] The present invention provides a method for pneumatically conveying solid particles, wherein the solid particles comprise a solid material that is capable of undergoing a dissociation equilibrium reaction that dissociates at least one type of gas component, and the solid particles are conveyed by a gas flow containing the gas component. It is preferable that an average particle size of the solid particles is from 0.1 to 1.0 mm. Furthermore, it is also preferable that the solid particles are conveyed by the gas flow in a state of any of a floating flow, a fluidized flow, and a plug flow. Furthermore, it is also preferable that the solid particles comprise a solid material that is capable of undergoing a dissociation equilibrium reaction that dissociates at least one type of gas component and at least one type of solid component, and the solid particles are conveyed in a conveying pipe by the gas flow, and the solid particles or the solid component stuck to an inner surface of the conveying pipe is removed by the gas flow.

IPC 8 full level

**B65G 53/04** (2006.01)

CPC (source: EP KR US)

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**B65G 53/16** (2013.01 - US); **B65G 53/50** (2013.01 - KR); **B65G 53/521** (2013.01 - KR); **B65G 2201/042** (2013.01 - KR);  
**B65G 2812/1616** (2013.01 - KR); **B65G 2812/1641** (2013.01 - KR)

Citation (search report)

- [XYI] US 4900200 A 19900213 - HARUMOTO KIMURA [JP], et al
- [Y] JP 2015040164 A 20150302 - DAIKIN IND LTD
- See references of WO 2018169042A1

Designated contracting state (EPC)

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JP WO2018169042 A1 20200116; KR 102434238 B1 20220818; KR 20190126281 A 20191111; US 10919714 B2 20210216;  
US 2020087083 A1 20200319; WO 2018169042 A1 20180920

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**EP 18767053 A 20180316;** CN 201880004881 A 20180316; JP 2018010426 W 20180316; JP 2019506291 A 20180316;  
KR 20197016657 A 20180316; US 201816470847 A 20180316